Claims

1. Process for the production of an actively-breathing composite in the form of a web consisting of a nonwoven made of synthetic material and a layer consisting entirely or mainly of PU for utilisation as an underlay for roofs and as a façade web,

   characterised in that

   - PU or a mixture of materials having a high PU content - referred to in the following as PU product or PU layer - is heated to melting temperature and
   - is extruded onto a nonwoven consisting of polypropylene (PP) in order to form a diffusion-permeable coating of the PP nonwoven as well as
   - pressed to the PP nonwoven to form an actively-breathing composite.

2. Process according to claim 1, characterised in that the PU product is extruded onto the PP nonwoven immediately in the region where the PU layer is pressed to the PP nonwoven.

3. Process according to claim 1 or 2, characterised in that the PP nonwoven is preheated.

4. Process according to any one of claims 1 to 3, characterised in that a bonding agent between the PU product and the PP nonwoven is used during the production of the composite.

5. Process according to any one of claims 1 to 4, characterised in that the PP nonwoven is provided with the bonding agent prior to applying the PU layer.

6. Process according to claim 5, characterised in that the bonding agent is applied to, in particular sprayed onto the PP nonwoven immediately prior to pressing the PU layer onto the PP nonwoven.

7. Process according to claim 6, characterised in that a reactive hot-melt, serving as the bonding agent, is applied to the PP nonwoven, in particular spot- or thread-wise for bringing about a structure consisting of wetted and clear regions.

8. Process according to any one of claims 3 to 7, characterised in that a reactive, PU-based hot-melt of the type JOWATHERM®REAKTANT 601.88 is so applied onto the PP nonwoven as a bonding agent that it has not cooled down yet when coming into contact with the extruded PU product.

9. Process according to any one of claims 1 to 8, characterised in that the PP nonwoven and the extruded PU product are pressed to one another continuously in the gap between two press rolls, in particular that of a casting roll and a pressing roll.

10. Process according to claim 9, characterised in that at least one of the two press rolls is heated.

11. Process according to any one of claims 1 to 4, characterised in that the bonding agent is mixed with the PU and a PU bonding agent blend is extruded onto the PP nonwoven as the PU product.

12. Process according to claim 11, characterised in that a mixture of PU and maleic anhydride-modified polyolefin is melted and extruded into the region, in which pressing between the PU product and the PP nonwoven is performed.

13. Process according to claim 12, characterised in that a PU product consisting of approx. 80 wt. % PU, in particular DESMOPAN®KU-2 8659 supplied by the company Bayer, and approx. 20 wt.% maleic anhydride-modified polyolefin, in particular EXXELOR® VA 1801 supplied by the company Exxon, is used.

14. Process according to any one of claims 1 to 5, characterised in that the PP nonwoven is provided with the bonding agent in the molten state.

15. Process according to any one of claims 1 to 4, characterised in that the extrusion of the PU product takes place while simultaneously applying the bonding agent to the PP nonwoven.

16. Process according to any one of claims 1 to 4, characterised in that the PU product and the bonding agent are co-extruded during application onto the PP nonwoven.

17. Process according to any one of claims 1 to 16, characterised in that polyurethane, in particular of the type DESMOPAN® KU-2 8659 made by the company Bayer, is used as the PU product.

18. Underlay for roofs and façade web,

characterised in that

- a nonwoven (1) made of PP and a layer (7), consisting of PU or a mixture of materials having a high PU content, extruded onto the PP nonwoven (1) are pressed together to form an actively-breathing composite (9) in the form of web material.

19. Roof underlay according to claim 18, characterised in that the composite (9) comprising the PU layer (7) and the PP nonwoven (1) comprises a bonding agent (3).

20. Roof underlay web according to claim 18 or 19, characterised in that the bonding agent (3) - in particular a reactive PU-based hot-melt (in particular JOWATHERM® REAKTANT 601.88) - is provided in the bonding region (9) between the PP nonwoven (1) and the PU layer (7).

21. Roof underlay according to claim 18 or 19, characterised in that the mixture of materials of the extruded layer (7) consists of approximately 80 wt.-% polyurethane, in particular of the type DESMOPAN® KU-2 8659 supplied by the company Bayer and approximately 20 wt.-% maleic anhydride-modified polyolefin, in particular of the type EXXELOR® VA 1801 supplied by the company Exxon.